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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/799,045	03/13/2004	Charles P. Plant	1004-01	6729
45105 7590 08/28/2007 LAW OFFICE OF JILL SHEDD & ASSOCIATIONS, P.C. 430 FRANKLIN VILLAGE DR #212 FRANKLIN, MA 02038			EXAMINER BEN, LOHA	
			ART UNIT 2873	PAPER NUMBER
			MAIL DATE 08/28/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/799,045	<b>Applicant(s)</b> PLANT ET AL.	
	<b>Examiner</b> Loha Ben	<b>Art Unit</b> 2873	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**od for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.

If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**US**

1) ☒ Responsive to communication(s) filed on 13 June 2007.

a) ☐ This action is **FINAL**.

2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### **osition of Claims**

4) ☒ Claim(s) 1-34 is/are pending in the application.

4a) Of the above claim(s) 17-34 is/are withdrawn from consideration.

5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.

3) ☒ Claim(s) 1-16 is/are rejected.

7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.

3) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### **lication Papers**

9) ☐ The specification is objected to by the Examiner.

0) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

1) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### **ity under 35 U.S.C. § 119**

2) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) ☐ All b) ☐ Some \* c) ☐ None of:

1. ☐ Certified copies of the priority documents have been received.

2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.

3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### **hment(s)**

Notice of References Cited (PTO-892)

Notice of Draftsperson's Patent Drawing Review (PTO-948)

Information Disclosure Statement(s) (PTO/SB/08)

Paper No(s)/Mail Date 0507.

4) ☐ Interview Summary (PTO-413)

Paper No(s)/Mail Date. \_\_\_\_\_.

5) ☐ Notice of Informal Patent Application

6) ☐ Other: \_\_\_\_\_.

### **DETAILED ACTION**

Applicant's election without traverse of claims 1-16 in the reply filed on June 13, 2007 is acknowledged.

#### ***Specification***

The disclosure is objected to because of the following informalities: Page 6, on line 26, after "10", "is" should be deleted; and page 11, on line 28, "know" should be -- known --.

Appropriate correction is required.

#### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims s 1-16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1-16 appear to be incomplete in that they are all ended with ";"(semi-colon), and not with "."(period).

Further, claims 1-14 contain inconsistent language in that, in claim 1, the preamble calls for "... detecting device", whereas in claims 2-14, the preamble of each of these claims refers to a "detector".

In claim 10: on lines 1 and 2, "the optical apparatus" has no antecedent basis.

In claim 11: on line 2, "the optical apparatus" has no antecedent basis.

In claim 15: lines 3 and 4 are not clearly understood in that it is not certain whether the different times recited are associated with two separate points, or just with one point.

### ***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-13, 15 and 16 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-15 of copending Application No. 10/797,882. Although the conflicting claims are not identical, they are not patentably distinct from each other because, obviously: claims 1 and 2 of the present case are a product of claim 1 of 10/797,882; claim 5 of the present case is the product of claims 4 and 5 of 10/797,882; claims 15 and 16 of the present case are the product of claims 14 and 15 of 10/797,882; and the remaining of the claims 3, 4, and

6-13 of the present case read on claims 2, 3 and 6-13 of 10/797,882, respectively, despite a slight difference in language.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-4, 12 and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Cornsweet et al.

Regarding claim 1, Fig. 1 of Cornsweet et al teaches a saccadic-motion detection device comprising an optical system (16, 20, 21, 24, 22) for focusing light reflected or emitted from a subject's eye (10) onto an optical navigation chip (23, 25).

Regarding claim 2, see column 4, line 5, and column 5, lines 25-33, for example.

Regarding claim 3, see column 1, lines 54-68.

Regarding claim 4, see column 1, lines 47-64; column 3, lines 47-58; and column 5, lines 25-40, for example.

Regarding 12, see column 3, lines 15-35; and column 4, lines 56-62.

Regarding claim 15, the scope is the same that of claim 1, except that the optical navigation chip of claim 1 is replaced with a motion transducer. The motion transducer

Art Unit: 2873

and the optical navigation chip, both inherently **contain photoelectric cells** that convert input energy of one form into output energy of another.

Claims 1-7, 10, 12, 15 and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Rothberg et al.

Regarding claim 1, reference is made to Fig. 6 of Rothberg et al (which is the same as Fig. 1 of Cornsweet et al above, except numerals are different). Therefore, no explanation is given here.

Regarding claim 2, see column 8, lines 50-61, for example.

Regarding claim 3, see column 8, lines 31-49.

Regarding claim 4, see column 4, lines 25-44; and column 8, lines 31-49.

Regarding claims 5-7, see column 1, line 16 to column 7, line 31.

Regarding claim 10, see column 2, lines 62-65.

Regarding claim 12, see column 8, lines 1-10, and lines 50-64.

Regarding 15, reference should be made to indication above associating with Cornsweet et al.

Regarding claim 16, see column 2, lines 62-65.

Claims 1 and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Smith.

Art Unit: 2873

In claim 1, as now worded (with preamble having no patentable weight), the optical system called for in the claim reads on elements 9, 13, 14 and 17; and the optical navigation chip reads on the CCDs 16, 18 and 19 of Smith.

Regarding claim 13, the content reads on CCDs 16, 18 and 19 of Smith.

Claims 1-4, 12, 13 and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Yee et al.

Regarding claim 1, although an optical system for focusing light reflected from the subject's eye E is not shown, this system inherently exist to provide accurate performance on the eye. As to optical navigation chip, again, the cameras 13h and 13v of Yee et al are the equivalents.

Regarding claim 2, see column 13, line 44.

Regarding claim 3, see column 5, lines 61-65.

Regarding claim 4, see columns 2, 4 and 6-8, for example.

Regarding claim 12, see column 2, lines 30-33; column 7, lines 11-14, for example.

Regarding claim 13, reference should be made to the vertical and horizontal cameras 13v and 13h, respectively.

With respect to claim 15, as pointed out above the cameras in consideration are the motion transducer called for in the claim.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 8 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cornsweet et al.

Regarding claim 8, Cornsweet et al teaches every limitation called for therein, except the capability of the optical navigation chip to provide position or motion information at greater than 1200 times per second. This capability, however, is suggested on column 7, lines 40-47, of Cornsweet et al. Therefore, it would have been obvious to one skilled in the art at the time of invention to utilize these suggested lines to carry out the invention of claim 8 in that the maximum step rate of the motor which is greater 1000 steps/second is obviously for accommodating the detection performance conducted on the subject's eye.

As regards claim 14, the creatures called for include humans and other animals which are capable of saccadic eye motion. These two types of creatures, clearly have the same natural elements, in this case, the eyes. Obviously, these two types of eyes have characteristic relating to saccadic motion.

Claims 8 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rothberg et al.

As is noted, Cornsweet et al and Rothberg et al have the same assignee, and common inventors. Therefore, no explanation is repeated here.

For claim 8, see column 15, lines 21-33.

For claim 14, see reason provided above.

### **Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Loha Ben whose telephone number is (571) 272-2323. The examiner can normally be reached on M-SAT, generally between 12:00 p.m. to 8:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Mack, can be reached on M-F, at (571) 272-2333. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Application/Control Number: 10/799,045  
Art Unit: 2873

Page 9

August 26, 2007

A handwritten signature in black ink, appearing to read 'Loha Ben', with a long horizontal stroke extending to the right.

**Loha Ben**  
**Primary Examiner**